ABSTRACT

The invention relates to a stent comprising a tubular base body which is open on the front sides thereof and has a peripheral wall that is at least partially covered with a coating system consisting of at least one polymer carrier and at least one pharmacologically active substance, said substance being released into the surrounding tissue once the stent has been implanted in the human or animal body. The aim of the invention is to create a coating system which enables an optimum local application of the active ingredient. To this end, at least one parameter of the inventive coating system, namely a concentration of the substance, a morphological structure of the carrier(s), a material modification of the carrier(s), and/or a layer thickness of the carrier(s), are predetermined in the longitudinal direction of the stent, in such a way that the substance takes on an elution characteristic that varies locally in the longitudinal direction of the stent and is determined according to the pathophysiological and/or rheological conditions to be expected during the application.